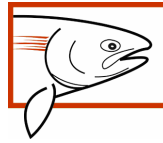




THE BRITISH COLUMBIA  
CONSERVATION FOUNDATION



GREATER GEORGIA BASIN  
**STEELHEAD** Recovery Plan  
[www.SteelheadRecoveryPlan.ca](http://www.SteelheadRecoveryPlan.ca)

Date: January 9, 2007

**Memo: Post-Flood (Nov. 2006) Inspection of Seymour River Habitat Structures**

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During early November 2006, extended periods of heavy rainfall resulted in a minimum bankfull event on the Seymour River (flood frequency to be determined). Site visits occurred on Nov. 10<sup>th</sup> and Dec. 20<sup>th</sup> by fisheries technicians of the Greater Georgia Basin Steelhead Recovery Plan (GGBSRP). Newly constructed structures (Summer 2006), as per Steelhead Recovery Program Effectiveness Monitoring protocols, were inspected, and structures constructed in 2003 and 2004 were also inspected to verify their structural integrity, and document any movement or damage.

High water levels on Nov. 10<sup>th</sup> prevented access to some structures but visual observations of all structures were performed. All structures appeared intact and functional. No structural movement, major erosion of streambanks, or accumulation of wood potentially impeding navigation was observed. Below the mid-valley intake, a triangulated structure on the right bank had experienced some bank erosion and GGBSRP crew members secured a safety line to a large conifer tree on Nov. 10<sup>th</sup>. Upon inspection on Dec. 20<sup>th</sup>, the structure did not show any 'tight' cables or any indication that further erosion had occurred.

Moderate flows on Dec. 20<sup>th</sup> allowed the crew to float the river from the hatchery to the bridge at Spur 4 to perform a detailed inspection. In summary, all large wood structures were intact and functional, some displaying good scour, deposition and collection of woody debris. While all the structures appeared as they were built, the bank appears to be eroding behind two structures near Spur 6.

- Upstream of the Spur 6 access point, flood flows eroded a small portion of the bank at the downstream end of a triangulated structure (Figure 1). While immediate action is not warranted (safety and anchoring cables were not observed 'tight'), the structure will continue to be monitored for additional erosion-related issues.
- Downstream of the Spur 6 access point, flood-level water was able to get behind the triangulated structure and erode a portion of the bank (Figure 2). Some minor

shifting of the structure occurred (cables observed 'tight'), but the structure is fully functional and has not migrated from its original position. While there is no immediate threat of the structure failing, or risk to navigation, monitoring will continue and plans are underway to perform corrective action.

All other instream wood structures, boulder clusters, bar stabilizers, and gravel spawning platforms were observed to be fully functional, intact and stable. A more detailed inspection of the structures will follow with a habitat structure assessment.

In addition to structure inspections on Dec. 20<sup>th</sup>, natural wood recruitment was observed in a number of locations, most notably near the Spur 7 access road. A large fir tree (Figure 3) fully spans the river channel and should be avoided by anyone paddling this reach of the river.



**Figure 1: LWD structure upstream of Spur 6 access point; high river levels eroded a portion of the bank behind the downstream primary log.**



**Figure 2: LWD structure downstream of the Spur 6 access point showing some of the bank erosion that occurred during the early November flood event (note: tree slide occurred several years ago).**



**Figure 3: Large fir brought down by bank erosion (probably combined with recent high winds) that is fully spanning the channel width immediately adjacent to the Spur 7 access road.**